No. 9900371

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Golden Seed Company, L.L.C

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'GSC3'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirteenth day of April, in the year two thousand and four.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary

REPRODUCE LOCALLY. *Include form number and date on all reproductions* — Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1 NAME OF OWNER
Golden Seed Company, L.L.C.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME

3. VARIETY NAME
GSC3

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
27525 135th Avenue North
Cordova, IL 61242

5. TELEPHONE *(include area code)*
(309) 654-2234

6. FAX *(include area code)*
(309) 654-2256

FOR OFFICIAL USE ONLY

PVPO NUMBER 9900371

FILING DATE
7-22-99

7 IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Limited Liability Company

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Illinois

9. DATE OF INCORPORATION
12-94

10 NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Ronald Walejko
Golden Seed Co, L.L.C.
28017 US Hwy 151 East
Platteville, WI 53818

RECEIPTS

FILING AND EXAMINATION FEES:
$ 2450.00
DATE 7-22-99

CERTIFICATION FEE:
$ 432.00
DATE 3/8/04

11. TELEPHONE *(include area code)*
(608) 762-5104

12. FAX *(include area code)*
(608) 762-5188

13. E_MAIL
rwalejko@~~mhtc.net~~ goldenseedco.com

14. CROP KIND *(Common Name)*
Corn (dent inbred lin

15 GENUS AND SPECIES NAME OF CROP
Zea mayes L.

16. FAMILY NAME *(Botanical)*
~~Maydeae~~ Gramineae

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☒ NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

- a. ☒ Exhibit A. Origin and Breeding History of the Variety
- b. ☒ Exhibit B. Statement of Distinctness
- c. ☒ Exhibit C. Objective Description of Variety
- d. ☐ Exhibit D. Additional Description of the Variety *(Optional)*
- e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
- f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
- g. ☒ Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 20 and 21 below)* ☒ NO *(If "no," go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☒ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☒ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
Ronald Walejko			
NAME *(Please print or type)*		NAME *(Please print or type)*	
Ronald Walejko			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Research Director	7/20/99		

TMS 4/16/03

9900371

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $2,45 ($300 filing fee and $2,150 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Varie Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amou of $300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

18a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. *See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.*

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22. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

At the time of application, no seed was sold of variety GSC3 as a component part of any hybric

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23. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

At the time of application, no patent number was issued to GSC3

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center–East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Exhibit A. Breeding History of GSC3

Summer 1987: A diallel of four lines, 329, 316, 317 and 335, was made. Three ears were crossed per each F1 cross. All six F1 crosses were successfully made with no variant or off-types observed this generation. At harvest, the three ears per F1 cross were shelled and 100 seeds from each F1 cross were bulked to make a 600 seed bulk. Line 329 was derived from Iowa State University BS14 synthetic, line 316 was derived from CM105/LH145, line 317 was derived from H93/CM105 and line 335 was derived from B73/NR109. This four-line synthetic was named "EBSSS Syn 1".

Winter 1987/88: In Hawaii, 300 seeds were planted of "EBSSS Syn 1". There were 250 successfully sib-mated plants. All ears were harvested. Ten seeds from each ear were bulked to make a 2500 seed bulk composite. No variant or off-types were observed.

Summer 1988: Six hundred seeds of the 2500 seed composite were planted and 300 ears were selfed. Selection was applied for stand-ability and stay-green. Ninety-nine ears were advanced and grown ear-to-row the next generation. Again, no variant or off-types were observed in this generation.

Summer 1989: Ninety-nine S1 lines were grown, ear-to-row, at Platteville, Wisconsin. Ten plants were selfed within each row. At harvest, selection was applied for stay-green, earliness and stand-ability. Visual selection was also applied for disease-free ears. Thirty-six of the ninety-nine lines were advanced to the S2 level, selecting one ear per line.

Summer 1990: Thirty-six S2 lines were grown, ear-to-row, at Platteville, Wisconsin. Eight plants were selfed per row and the same summer and fall selection criteria was used as in the previous generation. At harvest, twenty S2 lines were advanced to the S3 generation.

Summer 1991: Twenty S3 lines were grown, ear-to-row, at Platteville, Wisconsin. Six plants per row were selfed and the same summer and fall selection criteria were used as in the previous two generations. At harvest, six S3 lines were advanced to the S4 generation. No variant or off-types were observed in this generation.

Winter 1991/92: Six S4 lines were grown, ear-to-row, in Hawaii. Six plants were self pollinated per row. No selection pressure was used in Hawaii. At harvest, one of the six ears per row was advanced to the next generation. No variant or off-types were observed in this generation.

Exhibit A. Breeding History of GSC3

Summer 1992: Six S5 lines were grown, ear-to-row, at Platteville, Wisconsin. Again, six plants per row were selfed. At harvest, one ear from each of the two most uniform rows was selected. Selection was based on the uniformity of plants within the rows. Again, no variant or off-types were observed.

Winter 1992/93: Two S6 rows were planted in Hawaii and six plants were selfed per row. At harvest, one plant was selected within each row. Selection criteria was based only on a well-developed ear-type within the row.

Summer 1993: Two S7 rows were planted at Platteville, Wisconsin. All plants were selfed within the row. At harvest, 30 ears were harvested from the most uniform row and bulked. The sister line (row) was discarded. No variant or off-types were observed. The selected S7 row was uniform at this point in time.

Summer 1994: The bulk sample of 30 ears was grown at Platteville, Wisconsin in a twenty-row block. Ten plants per row were selfed. At harvest, five uniform, well-developed ears and plants were selected per row. The line was observed to be stable and uniform; therefore, the twenty rows were bulk shelled. This made up a 25,000 seed bulk.

Winter 1995/96: A 25,000 seed bulk was planted in an isolation in Chile, South America. No variant types were observed, however, five off-types were de-rogued out of the isolation prior to flowering. Again the line was stable and uniform. This was the third generation that GSC3 was uniform and stable.

Summers 1996-98: GSC3 was testcrossed to several male testers for hybrid performance evaluation.

Exhibit B. Statement of Distinctness of GSC3

GSC3's closest related variety would be the yellow dent variety of B73. GSC3 would differ from B73 by the following:

1. Its maturity is 1154.0 and 1197.0 heat units from emergence to 50% silk and 50% pollen, respectively. Meanwhile, B73's maturity is 1344.5 and 1379.5 heat units from emergence to 50% silk and 50% pollen, respectively.
2. Its plant height and ear height are 213.1 cm (+/- 6.93) and 62.7 cm (+/- 8.12), respectively, while B73's are 229.5 cm (+/- 6.17) and 94.6 cm (+/- 10.17), respectively.
3. Its leaf width and length of the ear node are 8.7 cm (+/- 0.65) and 76.0 cm (+/-4.75), respectively, while B73 is 9.6 cm (+/- 0.61) and 86.1 cm (+/- 3.83), respectively. Also, GSC3 has a 21-degree leaf angle (+/- 4.15) while B73 has an 11-degree leaf angle (+/- 3.23) on the second leaf above the ear at anthesis.
4. Its leaf color is dark green, Munsell code 7.5GY4-6, while B73 is medium-green, Munsell code 5GY6/8. Its leaf sheath pubescence is very heavy, rating a 9 (see Photo 1) and B73 is much less, rating a 3 on the scale. GSC3's leaves also have more marginal waves, rating a 7, and more longitudinal creases, rating a 3, as compared to B73, rating a 5 and a 1, respectively. Some evidence of GSC3's marginal waves and longitudinal creases can be seen in Photo 3.
5. Its tassel has 3 primary lateral branches (+/- 0.86) while B73 has 5 lateral branches (+/- 0.87). The branch angle from the central spike for GSC3 is 19 degrees (+/- 7.12) and B73 is 4 degrees (+/- 1.66). The pollen shed for GSC3 is slightly lighter, rating a 6, than B73, which rates an 8. GSC3's anther color is light green, Munsell code 2.5GY8/4, while B73 is salmon color, Munsell code 7.5YR8/4. GSC3's glume color is Munsell code 5GY6/8 with moderate accumulation of anthocyanin on the tip of the glumes (see Photo 3), while B73's glume color is medium green, Munsell code 5GY6/10.
6. Its silk color, three days after emergence, is light green, Munsell code 2.5GY8/6, and B73 is the same. Also, GSC3's fresh husk color 25 days after mid-silk is similar to B73. However, GSC3's dry husk color 65 days after mid-silk is pale yellow, Munsell code 5Y8/4 and B73 is light green, Munsell code 2.5GY8/6. At the dry husk stage, GSC3's position of the ear is pendant and B73 is more upright. GSC3 also has a very loose husk while B73 is moderately loose. Also, GSC3 has a shorter husk extension (5 cm) than B73 (8-10 cm). The difference in the husk colors 65 days after mid-silk is due in part to GSC3 being an earlier maturing variety than B73.

Exhibit B. Statement of Distinctness of GSC3

7. Its ear length is 17.4 cm (+/- 0.57) while B73 is 12.8 (+/- 0.73). GSC3's ear diameter is 36.4 cm (+/-1.60) while B73 is 45.1 cm (+/- 1.27). GSC3's ear weight is 120.5 grams (+/- 12.83) while B73 is 103.9 grams (+/- 12.76). Also, GSC3 has 14 kernel rows (+/- 1.47) and B73 has 18 kernel rows (+/- 1.63).
8. Its dried kernel length is 8.9 mm (+/- 0.60) while B73 is 10.4 mm (+/- 0.81). Kernel width and thickness are similar to B73. GSC3 has less percent round kernels, 32% (+/- 6.18), as compared to B73, 40% (+/- 7.85).
9. Its cob diameter at mid-point is 22.4 mm (+/-1.0) while B73 is 27.6 mm (1.08).
10. Finally, GSC3's per se shelled grain yield is less than B73's. In a two replication, two-location test, GSC3 and B73 yields were 3136.5 and 4704.0 kg/hectare, respectively. The LSD (.05) was +/- 852.0 kg/ha.
11. Probabilities associated with Student's Paired t-test for traits of GSC3, as compared to B73, are shown in Table 1.

Table 1. Probability from Student's Paired t-test.

TRAIT	P value
Plant Height	1.70131E-10
Ear Height	2.00639E-11
Number of Tillers	0.000000000
Ears per Stalk	0.042896002
Width of Ear Node Leaf	7.83706E-05
Length of Ear Node Leaf	5.60477E-09
Leaf Angle	3.13232E-11
Number of Primary Lateral Tassel Branches	3.15047E-13
Tassel Length	0.882418459
Ear Length	6.37351E-20
Ear Diameter at Midpoint	1.69692E-16
Ear Weight	6.11946E-05
Number of Kernel Rows	6.98086E-06
Kernel Length	6.34597E-08
Kernel Width	0.103431219
Kernel Thickness	0.066616516

Photo 1: GSC3 - Leaf Sheath Pubescence

Photo 2: GSC3 - Anthocyanin of Brace Roots

Photo 3: GSC3 - Tassel Lateral Branches

Photo 4: GSC3 - Silk Color

FORM SD-470-28
(9-1-92)

EXHIBIT C
(Corn; Maize)

United States Department of Agriculture, Agricultural Marketing Service
Science Division, Plant Variety Protection Office
National Agricultural Library Building, Room 500
Beltsville, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
CORN (*Zea mays* L.)

Name of Applicant(s)	Variety Seed Source	Variety Name or Temporary Designation
Golden Seed Company, L.L.C.	9723	GSC3

Address (Street & No., or R.F.D. No., City, State, Zip Code and Country)	FOR OFFICIAL USE
27525 135th Avenue North, Cordova, IL 61242	PVPO Number 9900371

Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by a '*' are considered necessary for an adequate variety description and must be completed.

COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments section):

01=Light Green	06=Pale Yellow	11=Pink	16=Pale Purple	21=Buff
02=Medium Green	07=Yellow	12=Light Red	17=Purple	22=Tan
03=Dark Green	08=Yellow-Orange	13=Cherry Red	18=Colorless	23=Brown
04=Very Dark Green	09=Salmon	14=Red	19=White	24=Bronze
05=Green-Yellow	10=Pink-Orange	15=Red & White	20=White Capped	25=Variegated (Describe)
				26=Other (Describe)

STANDARD INBRED CHOICES (Use the most similar (in background and maturity) of these to make comparisons based on grow-out trial data):

Yellow Dent Families:		Yellow Dent (Unrelated):	Sweet Corn:
Family	Members	Col09, ND246,	C13, Iowa5125, P39, 2132
B14	CM105, A632, B64, B68	Oh7, T232	
B37	B37, B76, H84	W117, W153R	Popcorn:
B73	N192, A679, B73, NC268	W182BN	SG1533, 4722, HP301, HP7211
C103	Mo17, Va102, Va35, A682		
Oh43	A619, MS71, H99, Va26	White Dent:	Pipecorn:
WF9	W64A, A554, A654, Pa91	CI66, H105, Ky228	Mo15W, Mo15W, Mo24W

1. TYPE: (describe intermediate types in Comments section)
* 2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn

Standard Inbred Name B73
2

2. REGION WHERE DEVELOPED IN THE U.S.A.:
* 2 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral 6=Southwest 7=Other _____

Standard Seed Source Iowa State Univ.
2

3. MATURITY (In Region Best Adaptability: show Heat Unit formula in "Comments" section):

	DAYS	HEAT UNITS		DAYS	HEAT UNITS
*	71	11540	From emergence to 50% of plants in silk	80	13445
*	73	11970	From emergence to 50% of plants in pollen	82	13795
	2	480	From 10% to 90% pollen shed	3	760
(*)			From 50% silk to optimum edible quality		
	49	9100	From 50% silk to harvest at 25% moisture	62	11020

4. PLANT:	Standard Deviation	Sample Size		Standard Deviation	Sample Size
* 2131 cm Plant Height (to tassel tip)	6.93	25	2295	6.17	25
* 627 cm Ear Height (to base of top ear node)	8.12	25	946	10.17	25
159 cm Length of Top Ear Internode	1.15	25	139	1.37	25
00 Average Number of Tillers	0.0	25	00	0.0	25
* 20 Average Number of Ears per Stalk	0.0	25	1.8	0.37	25
3 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark			3		

Application Variety Data — Page 2			Standard Inbred Data		
5. LEAF:	Standard Deviation	Sample Size		Standard Deviation	Sample Size
* 8.7 cm Width of Ear Node Leaf	0.65	25	9.6	0.61	25
* 76.0 cm Length of Ear Node Leaf	4.75	25	861	3.83	25
* 6 Number of leaves above top ear	0.56	25	6	0.65	25
21 degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	4.15	25	11	3.23	25
* 03 Leaf Color (Munsell code 7.5GY4/6)			02 (Munsell code 5GY6/8)		
9 Leaf Sheath Pubescence (Rate on scale from 1=none to 9=like peach fuzz)			3		
7 Marginal Waves (Rate on scale from 1=none to 9=many)			5		
3 Longitudinal Creases (Rate on scale from 1=none to 9=many)			1		
6. TASSEL:	Standard Deviation	Sample Size		Standard Deviation	Sample Size
* 3 Number of Primary Lateral Branches	0.86	25	5	0.87	25
19 Branch Angle from Central Spike	7.12	25	4	1.66	25
*398 cm Tassel Length (from top leaf collar to tassel tip)	2.91	25	399	1.87	25
6 Pollen Shed (Rate on scale from 0=male sterile to 9=heavy shed)			8		
01 Anther Color (Munsell code 2.5GY8/4)			09 (Munsell code 7.5YR8/4)		
25 Glume Color (Munsell code 5GY6/8)			02 (Munsell code 5GY6/10)		
1 Bar Glumes (Glume Bands): 1=Absent 2=Present			1		
7a. EAR (Unhusked Data):					
* 01 Silk Color (3 days after emergence) (Munsell code 2.5GY8/6)			01 (Munsell code 2.5GY8/6)		
02 Fresh Husk Color (25 days after 50% silking) (Munsell code 5GY6/6)			02 (Munsell code 5GY6/8)		
06 Dry Husk Color (65 days after 50% Silking) (Munsell code 5Y8/4)			01 (Munsell code 2.5GY8/6)		
* 3 Position of Ear at Dry Husk Stage: 1=Upright 2=Horizontal 3=Pendent			1		
1 Husk Tightness (Rate on scale from 1=very loose to 9=very tight)			5		
2 Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8 cm) 3=Long (8-10 cm beyond ear tip) 4=Very Long (>10 cm)			3		
7b. EAR (Husked Ear Data):	Standard Deviation	Sample Size		Standard Deviation	Sample Size
* 174 cm Ear Length	0.57	25	128	0.73	25
* 364 mm Ear Diameter at mid-point	1.60	25	451	1.27	25
1205 gm Ear Weight	12.83	25	1039	12.76	25
* 14 Number of Kernel Rows	1.47	25	18	1.63	25
2 Kernel Rows: 1=Indistinct 2=Distinct			2		
1 Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			1		
127 cm Shank Length	2.65	25	6.7	1.59	25
1 Ear Taper: 1=Slight 2=Average 3=Extreme			2		

Application Variety Data	Standard Inbred Data

Note: Use chart on first page to choose color codes for color traits.

Application Variety Data	Page 3		Standard Inbred Data		
8. KERNEL (Dried):	Standard Deviation	Sample Size		Standard Deviation	Sample Size
8 9 mm Kernel Length	0.60	25	1 0.4	0.81	25
6 8 mm Kernel Width	0.55	25	6.5	0.65	25
4 4 mm Kernel Thickness	0.70	25	4.0	1.02	25
3 2 0 % Round Kernels (Shape Grade)	6.18	25	4 0.0	7.85	25
1 Aleurone Color Pattern: 1=Homozygous 2=Segregating			1		
(*) 1 8 Aleurone Color (Munsell code colorless)			1 8 (Munsell code colorless)		
* 0 7 Hard Endosperm Color (Munsell code 2.5Y8/10)			0 7 (Munsell code 2.5Y8/10)		
* 3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10=Other			3		
2 4.9 gm Weight per 100 Kernels (unsized sample)	0.49	25	2 4.2	0.38	25
9. COB:	Standard Deviation	Sample Size		Standard Deviation	Sample Size
* 2 2 4 mm Cob Diameter at mid-point	1.00	25	2 7.6	1.08	25
0 9 Cob Color (Munsell code 10R4/10)			0 9 (Munsell code 10R5/8)		

10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant): leave blank if not tested; leave Race or Strain Options blank if polygenic):

A. Leaf Blights, Wilts, and Local Infection Diseases	
Anthracnose Leaf Blight (*Colletotrichum graminicola*)	
Common Rust (*Puccinia sorghi*)	
Common Smut (*Ustilago maydis*)	
Eyespot (*Kabatiella zeae*)	
Goss's Wilt (*Clavibacter michiganense* spp. *nebraskense*)	
3 Gray Leaf Spot (*Cercospora zeae-maydis*)	2
Helminthosporium Leaf Spot (*Bipolaris zeicola*) Race ____	Race ____
Northern Leaf Blight (*Exserohilum turcicum*) Race ____	Race ____
Southern Leaf Blight (*Bipolaris maydis*) Race ____	Race ____
Southern Rust (*Puccinia polysora*)	
Stewart's Wilt (*Erwinia stewartii*)	
Other (Specify)	
B. Systemic Diseases	
Corn Lethal Necrosis (MCMV and MDMV)	
Head Smut (*Sphacelotheca reiliana*)	
Maize Chlorotic Dwarf Virus (MCDV)	
Maize Chlorotic Mottle Virus (MCMV)	
Maize Dwarf Mosaic Virus (MDMV) Strain ____	Strain ____
Sorghum Downy Mildew of Corn (*Peronosclerospora sorghi*)	
Other (Specify)	
C. Stalk Rots	
Anthracnose Stalk Rot (*Colletotrichum graminicola*)	
Diplodia Stalk Rot (*Stenocarpella maydis*)	
Fusarium Stalk Rot (*Fusarium moniliforme*)	
Gibberella Stalk Rot (*Gibberella zeae*)	
Other (Specify)	
D. Ear and Kernel Rots	
Aspergillus Ear and Kernel Rot (*Aspergillus flavus*)	
Diplodia Ear Rot (*Stenocarpella maydis*)	
Fusarium Ear and Kernel Rot (*Fusarium moniliforme*)	
Gibberella Ear Rot (*Gibberella zeae*)	
Other (Specify)	

Application Variety Data	Standard Inbred Data

Note: Use chart on first page to choose color codes for color traits.

Application Variety Data	Page 4		Standard Inbred Data		
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested):					
__ Banks Grass Mite (*Oligonychus pratensis*)	Standard Deviation	Sample Size	__	Standard Deviation	Sample Size
Corn Earworm (*Helicoverpa zea*)					
__ Leaf-Feeding			__		
Silk Feeding :					
___.__ mg larval wt.	_____	____	___.__	_____	____
__ Ear Damage			__		
__ Corn Leaf Aphid (*Rhopalosiphum maidis*)			__		
__ Corn Sap Beetle (*Carpophilus dimidiatus*)			__		
__ European Corn Borer (*Ostrinia nubilalis*)			__		
3 1st Generation (Typically Whorl Leaf Feeding)			2		
2 2nd Generation (Typically Leaf Sheath-Collar Feeding)			3		
Stalk Tunneling :					
___.__ cm tunneled/plant	_____	____	___.__	_____	____
__ Fall Armyworm (*Spodoptera frugiperda*)			__		
__ Leaf-Feeding			__		
Silk-Feeding :					
___.__ mg larval wt.	_____	____	___.__	_____	____
__ Maize Weevil (*Sitophilus zeamaize*)			__		
__ Northern Rootworm (*Diabrotica barberi*)			__		
__ Southern Rootworm (*Diabrotica undecimpunctata*)			__		
__ Southwestern Corn Borer (*Diatraea grandiosella*)					
__ Leaf Feeding			__		
Stalk Tunneling :					
___.__ cm tunneled/plant	_____	____	___.__	_____	____
__ Two-spotted Spider Mite (*Tetranychus urticae*)			__		
__ Western Rootworm (*Diabrotica virgifera virgifera*)			__		
__ Other (Specify) _____			__ _____		
12. AGRONOMIC TRAITS:					
3 Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.)			4		
0 1 % Dropped Ears (at 65 days after anthesis)			0.2		
0 0 % Pre-anthesis Brittle Snapping			0 0		
0 5 % Pre-anthesis Root Lodging			2 0		
0 0 % Post-anthesis Root Lodging (at 65 days after anthesis)			0 0		
3 1 36.5 Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)	69.2 bu/ac		4 7 04.0	85.8 bu/ac	

13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied)

0 Isozymes 0 RFLP's 0 RAPD's

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U.S. Department of Agriculture. 1936, 1937. Yearbook.

COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):

Addendum to Exhibit C for Corn Inbred Variety GSC3

The data collected for the objective description of the variety GSC3 was collected during the summer of 1998 at Platteville, Wisconsin. There was 26.79 inches of rainfall during the growing season. This was slightly above the 30-year average. Heat units during the growing season were 2712, which was about 100 units above the 30-year average. No supplemental irrigation was used on these plots. Fertility is kept at a high level. With high fertility and above average heat units, plant top-growth was larger than normal. The variety B73 is a full season variety at this location.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Golden Seed Company, L.L.C.		GSC3

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	5. TELEPHONE *(include area code)*	6. FAX *(include area code)*
27525 135th Avenue North Cordova, IL 61242	(309) 654-2234	(309) 654-2256

7. PVPO NUMBER 9900371

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? [X] YES [ ] NO
If no, give name of country

10. Is the applicant the original owner? [X] YES [ ] NO *If no, please answer one of the following:*

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

[ ] YES [ ] NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

[ ] YES [ ] NO If no, give name of country

11. Additional explanation on ownership *(if needed, use reverse for extra space)*:

GSC3 was developed by Ronald Walejko. The breeding work was conducted at Plattville, WI. The entire development of this line was conducted by Ronald Walejko while he was employed by Golden Seed Company, L.L.C. Golden Seed Company has 100% ownership of this line. Ronald Walejko has no rights of ownership to GSC3. As originator of this line, Ronald Walejko has the authority to apply for a plant variety protection certificate for GSC3.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

STD-470-E (07-97) *(Destroy previous editions).*
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